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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/770,383	02/02/2004	Silvano Gai	112025-0096C1	9678

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EXAMINER

HAMZA, FARUK

ART UNIT	PAPER NUMBER
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2155

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/770,383	Applicant(s) GAI ET AL.	
	Examiner FARUK HAMZA	Art Unit 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35-40, 46 and 49-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 35-40, 46 and 49-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>02/02/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the communication filed on July 11, 2008. Applicant's election without traverse of Species 3 (Claims 35-40 and 46) in the reply filed on July 11, 2008 is acknowledged. Claims 49-62 have been newly added. Claims 1-34, 41-45 and 47-48 have been canceled. Claims 35-40, 46 and 49-62 are pending.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claim limitation "formulate discover message" "one or more proffered IP addresses for assignment to the interface lacking connectivity to the at least one server" "the offer includes a variable length IP address bearer option" "configured and arranged to receive and examine an acknowledgment from the at least one server that confirms its receipt of the request message" "the discover message contains an option that is marked by the layer three device to indicate that it is requesting assignment of one or more IP addresses for an interface lacking connectivity to the at least one server" "offer includes a variable length IP address bearer option" "offer message includes a routing parameter option" "the intermediate device is a router" "offer sent by the at least one server includes a subnet mask for use with the interface lacking connectivity to the at least one server" "lease time indicating a life of the respective proffered IP address" "verifying that an offer is not received in response to the discover message from

the interface lacking connectivity to the server” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 40 is objected to because of the following informalities: it recites “offer message a includes a”. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 36-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 36-37 recite the limitation "its" in line 7 and 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 35-40, 46 and 49-62 are rejected under 35 U.S.C. 102(e) as being anticipated by Beser (U.S. Patent Number 6,049,826) hereinafter referred as Beser.

Beser teaches the invention as claimed including System and method for TFTP server to override a request for a standard configuration file whose name is supplied to a cable modem in a Dynamic Host Configuration Protocol (DHCP) response message during initialization (abstract).

As to claim 35, Beser teaches a layer three device for connection to a computer network having at least one server, the layer three device having a plurality of interfaces each representing a logical connection to the computer network, the layer three device comprising:

- a message transmitter connected to the computer network (Fig. 5); and
- a message receiver connected to the computer network (Fig. 5),

wherein the message transmitter is configured and arranged to formulate and broadcast a discover message from an interface of the layer three device that provides connectivity via the network to the server (Fig. 7A, 142,144), the discover message indicating that the layer three device is requesting assignment of one or more Internet Protocol (IP) addresses for an interface lacking connectivity to the at least one server (Column 15, lines 53-67), and the message receiver is configured and arranged to receive and examine an offer sent by the at least one server (Fig. 7B, 150), that includes at least one or more proffered IP addresses for assignment to the interface lacking connectivity to the at least one server (Fig. 7B, 154).

As to claim 36, Beser teaches a layer three device as defined in claim 35 wherein the message transmitter is configured and arranged to formulate and send to the server a request message (Fig. 7A, 142), in response to the offer, indicating that the layer three device has accepted the proffered one or more IP addresses for the respective interface and the message receiver is configured

and arranged to receive and examine an acknowledgment from the at least one server that confirms its receipt of the request message (Fig. 12).

As to claim 37, Beser teaches a layer three device as defined in claim 35 wherein the discover message contains an option that is marked by the layer three device to indicate that it is requesting assignment of one or more IP addresses for an interface lacking connectivity to the at least one server (Column 14, lines 45-63).

As to claim 38, Beser teaches a layer three device as defined in claim 35 wherein the offer contains an option that is marked by the at least one server to indicate that the corresponding message contains one or more proffered IP addresses for assignment to the interface lacking connectivity to the at least one server (Column 16, lines 46-60).

As to claim 39, Beser teaches a layer three device as defined in claim 35 wherein the offer includes a variable length IP address bearer option (Column 19, lines 10-25).

As to claim 40 Beser teaches a layer three device as defined in claim 35 wherein the offer message a includes a routing parameter option (Column 16, lines 46-60).

As to claim 46, Beser teaches a computer readable medium comprising computer executable instructions for:

broadcasting a discover message only from an interface of a layer three device that provides connectivity via the network to a server, the discover

message indicating that the layer three device is requesting assignment of one or more Internet Protocol (IP) addresses for an interface lacking connectivity to the server (Fig. 12, 142);

receiving an offer message, in response to the discover message, the offer message including at least one or more proffered IP addresses for assignment to the interface 9 lacking connectivity to the server (Fig. 12, 190);

sending a request message, in response to the offer message, the request message indicating that the layer three device has accepted the proffered one or more IP addresses for the interface lacking connectivity to the server (Fig. 12, 194);

receiving an acknowledgment, in response to the request message, confirming receipt of the request message (Fig. 12, 210); and

committing the accepted IP address at the interface lacking connectivity to the server of the layer three device in response to the acknowledgment (Fig. 12, 212).

As to claim 49, Beser teaches a layer three device as defined in claim 35 wherein the layer three device is an intermediate device operating at the network layer of a communication protocol stack implemented within the computer network (Fig. 1).

As to claim 50, Beser teaches a layer three device as defined in claim 49 wherein the intermediate device is a router (Fig. 8, cable modem also can be a router).

As to claim 51, Beser teaches a layer three device as defined in claim 35 wherein the message transmitter is further configured and arranged to formulate and broadcast a discover message from the interface lacking connectivity to the at least one server, the discover message requesting assignment of one or more IP addresses for the interface lacking connectivity to the at least one server, and wherein the message receiver is further configured and arranged to verify that an offer is not received in response to the discover message from the interface lacking connectivity to the at least one server (Fig. 12).

As to claim 52, Beser teaches a layer three device as defined in claim 35 wherein the offer sent by the at least one server includes a subnet mask for use with the interface lacking connectivity to the at least one server (Column 16, lines 31-Column 17, lines 39).

As to claim 53, Beser teaches a layer three device as defined in claim 35 wherein the offer sent by the at least one server includes, for each proffered IP address, a corresponding lease time indicating a life of the respective proffered IP address (Column 16, lines 31-Column 17, lines 39).

As to claim 54, Beser teaches a method comprising:

broadcasting a discover message from an interface of a layer three device that provides connectivity to a server, the discover message indicating that the layer three device is requesting assignment of a Internet Protocol (IP) address for an interface of the layer three device lacking connectivity to the server (Fig. 12);

receiving an offer message from the server, on the interface that provides connect activity to the server, the offer message including a proffered IP addresses for assignment to the interface lacking connectivity to the server (Fig. 12); and

assigning the proffered IP address to the interface of the layer three device lacking connectivity to the server (Fig. 12).

As to claim 55, Beser teaches the method as defined in claim 54 further comprising:

sending a message, in response to the offer message, the message indicating that the layer three device has accepted the proffered IP address for the interface lacking connectivity to the server (Fig. 12); and

receiving an acknowledgment, in response to the message, confirming receipt of the message (Fig. 12).

As to claim 56, Beser teaches the method as defined in claim 54 further comprising:

marking an option in the discover message, by the layer three device, to indicate that the layer three device is requesting assignment of an address for an interface lacking connectivity to the at least one server (Column 16, lines 46-60).

As to claim 57, Beser teaches the method as defined in claim 54 wherein the layer three device is an intermediate device operating at the network layer of a communication protocol stack implemented within a network (Fig. 1).

As to claim 58, Beser teaches the method as defined in claim 57, wherein the intermediate device is a router (Fig. 8, cable modem also can be a router).

As to claim 59, Beser teaches the method as defined in claim 54, further comprising:

broadcasting a discover message from the interface lacking connectivity to the server, the discover message requesting assignment of one or more IP addresses for the interface lacking connectivity to the server; and verifying that an offer is not received in response to the discover message from the interface lacking connectivity to the server (Fig. 12).

As to claim 60, Beser teaches the method as defined in claim 54 wherein the offer sent by the server includes a subnet mask for use with the interface lacking connectivity to the server (Column 16, lines 31-Column 17, lines 39).

As to claim 61, Beser teaches the method as defined in claim 54 wherein the offer sent by the server includes, for each proffered IP address, a corresponding lease time indicating a life of the respective proffered IP address (Column 16, lines 31-Column 17, lines 39).

As to claim 62, Beser teaches the method as defined in claim 54 wherein the offer sent by the server includes an identification of a routing protocol to be used by the layer three device with the interface lacking connectivity to the server (Column 16, lines 31-Column 17, lines 39).

6. **Examiner's Note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of

the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in its entirety as potentially teaching of all or part of the claimed invention, as well as the context.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Radia et al. (U.S. Patent Number 5,922,049) discloses method for using DHCP and marking to override learned IP addresses in a network.
- Fukui (U.S. Patent Number 6,131,119) discloses automatic configuring system.
- Ohno et al. (U.S. Patent Number 6,219,715) discloses automatic address distribution system.
- Sitaraman et al. (U.S. Patent Number 6,243,749) discloses dynamic network address updating.
- Lim et al. (U.S. Patent Number 5,884,024) discloses secure DHCP server.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faruk Hamza whose telephone number is 571-272-7969. The examiner can normally be reached on Monday through Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached at 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll –free).

Faruk Hamza

Patent Examiner

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